

PATENT ABSTRACTS OF JAPAN

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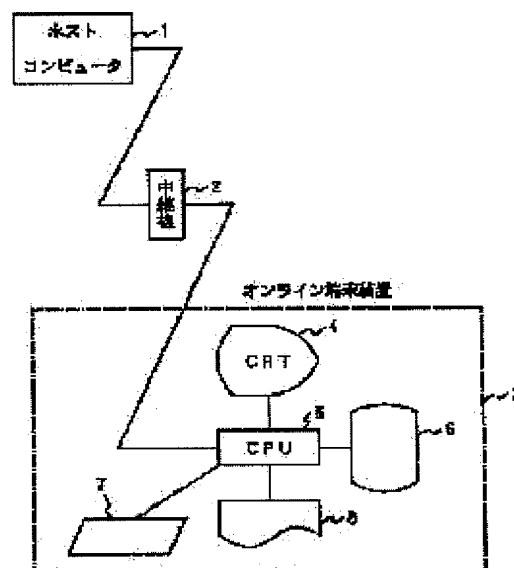
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(54) DISCRIMINATION SYSTEM BY SCREEN CONTROL OF ON-LINE TERMINAL DEVICE

(57)Abstract:

PURPOSE: To make an error check immediately at the time of input and improve the processing efficiency of dealings by judging whether or not data should be sent to a host computer by the processing of a program corresponding to a specific file.

CONSTITUTION: The discrimination by the screen control of the on-line terminal device 3 has a screen file which has a function for checking physical elements of data such as the length and input character type of input data as to the contents of a key input and a dealings information file for checking whether or not the contents of dealings regarding the screen file are logically sent to the host computer 1. This dealings information file enables the logical adequacy of the input data to be discriminated and an application program performs error processing on the on-line terminal device 3 for the dealings information file without previously generating a message for which error processing is performed by the host computer 1 and prompts an operator to perform re-input operation, thereby improving the processing efficiency.



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CLAIMS

[Claim(s)]

[Claim 1]A distinction method characterized by comprising the following by screen control of an online terminal.

A screen file which sets up a digit number, an attribute, and a screen layout to input data inputted from a keyboard.

A transaction information file which sets up dealings modes, such as existence of officer's approval dealings, and an on-line off-line idol, and job mode of a window and back.

An application program which distinguishes validity as dealings other than the physical validity of said input data by using a transaction number as a common key using said screen file and said transaction information file.

[Claim 2]In a distinction method by screen control of an online terminal which holds interactive processing with a host computer, A distinction method by screen control of an online terminal carrying out error handling within said online terminal, and demanding reinput from an operator with an application program to a transaction information file which enables distinction of the logical validity of input data.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application]This invention relates to the distinction method by the screen control of the online terminal of a financial institution business store especially about the distinction method by the screen control of an online terminal.

[0002]

[Description of the Prior Art]If the screen control in the online terminal of a financial institution business store is conventionally explained in simple in consideration of drawing 1, the screen control in an online terminal, It is performed by the host computer 1 and the online terminal 3 which connected with this host computer 1 via the data telecommunication line. The relay aircraft 2 is formed in the middle of the data telecommunication line.

[0003]The online terminal 3 has CRT4, CPU5, the hard disk 6, the keyboard 7, and the printer 8. In the online terminal 3, it inputs by choosing a screen by the key operation of the keyboard 7, and data is transmitted to the host computer 1 through the relay aircraft 2. In that case, the data relevant to applicable dealings is read from other dealings, and it displays on CRT4, and transmits to the host computer 1.

[0004]The host computer 1 carried out analysis processing of the input data from the online terminal 3, and has replied the notice of a response of a normal result or an unusual result to the online terminal 3 (see JP,2-35569,A).

[0005]

[Problem(s) to be Solved by the Invention]As mentioned above, the chief aim is placed by laborsaving of the input process in the screen control of the conventional online terminal, but. The method was laborsaving (the number of inputs is reduced) of a direct input, such as reusing the data used by pre-dealings, or holding a pre-dealings result as associated data of other dealings, and reusing it.

[0006]However, in the screen control of the conventional online terminal, Processing of the check of the validity of data, for example, online trade improper dealings, prior calculation expense improper dealings, or officer's approval important point dealings, The host computer 1 is performing, and if there is no input of a recognition code, in order to perform an error-handling response inevitably, with the host computer 1, there is a problem that reinput and retransmission of message will be needed from the online terminal 3.

[0007]So, there is SUBJECT of this invention in providing the distinction method by the screen control of the online terminal which lessens error handling with a host computer as much as possible.

[0008]

[Means for Solving the Problem]In a distinction method [according to this invention] by screen control of an online terminal, A screen file which sets up a digit number, an attribute, and a screen layout to input data inputted from a keyboard, A transaction information file which sets up dealings modes, such as existence of officer's approval dealings, and an on-line off-line idol, and job mode of a window and back, A distinction method by screen control of an online terminal having an application program which distinguishes validity as dealings other than the physical

validity of said input data by using a transaction number as a common key using said screen file and said transaction information file is obtained.

[0009]In a distinction method by screen control of an online terminal which holds interactive processing with a host computer according to this invention, A distinction method by screen control of an online terminal carrying out error handling within said online terminal, and demanding reinput from an operator with an application program to a transaction information file which enables distinction of the logical validity of input data is obtained.

[0010]

[Function]According to this invention, to the transaction information file which enables distinction of the logical validity of input data, without creating the wording of a telegram by which error handling is beforehand carried out with a host computer, error handling is carried out within an online terminal, and reinput is demanded from an operator with an application program.

[0011]

[Example]Next, one example of the distinction method by the screen control of the online terminal of this invention is described based on drawing 1 thru/or drawing 4.

[0012]First, with reference to drawing 1, the distinction method by the screen control of an online terminal is held by the host computer 1 and the online terminal 3 which connected with this host computer 1 via the data telecommunication line. The relay aircraft 2 is formed in the middle of the data telecommunication line.

[0013]CRT4 which displays the contents as which the online terminal 3 was inputted by the keyboard 7 which inputs, and this keyboard 7, It has the hard disk 6, CPU5 which develop and process required information from this hard disk 6, and the printer 8 which prints the processing result from the host computer 1.

[0014]The host computer 1 carries out analysis processing of the input data from the online terminal 3, and replies the notice of a response of a normal result or an unusual result to the online terminal 3.

[0015]In the distinction method by the screen control of this online terminal. The screen file (see drawing 2) 10 which has a function which checks the physical element of the data of length, an input character type, etc. of input data to the contents of the keystroke, It has the transaction information file (see drawing 3) 20 for confirming whether transmit the contents of dealings to the host computer 1 logically about the screen file 10. It has the application program A which associates the screen file 10 and the transaction information file 20, and performs the contents check of input data.

[0016]The transaction information file 20 enables distinction of the logical validity of input data, and to the transaction information file 20 with the application program A. The wording of a telegram by which error handling is beforehand carried out with the host computer 1 is not created, but error handling is carried out within the online terminal 3, reinput is demanded from an operator, and processing efficiency is raised. The application program A distinguishes the validity as dealings.

[0017]The host computer 1 in a financial institution business store, The send data from the online terminal 3 is processed, if the processing result is normal, that, the contents of passbook check printing will be sent to the online terminal 3 via the relay aircraft 2, and, in the case of abnormal termination, an error notification will be sent to the online terminal 3 via the relay aircraft 2.

[0018]On the other hand, the online terminal 3 creates the data which should be sent to the host computer 1. For this reason, a screen number for an operator to trade is inputted into the keyboard 7, looking at the display of CRT4. Then, the screen file 10 is called from the hard disk 6, and it develops by CPU5, and is displayed on CRT4. Here, the data transmitted to the host computer 1 is created by performing the item input from the keyboard 7. After a keystroke is completed, by carrying out the depression of the send key of the keyboard 7, the wording of a telegram processed to the host computer 1 will be transmitted, and it will wait for a processing result. And each processing in the case where it prints to the printer 8 according to the contents of a response from the host computer 1, and the case of displaying on CRT4 is performed, and applicable dealings are ended. Handling [a cash processing machine may be

connected depending on the case, and / cash receipt and disbursement].

[0019]As mentioned above, the online terminal 3 chooses the screen which trades, inputs data, transmits to the host computer 1, and processes the contents of a response.

[0020]Here, if processing of the data content on a screen is described, the screen file 10 and the transaction information file 20 are stored in the hard disk 6. As each item, as shown in No.1 - No.9, the screen file 10, It has a function in which the account number 21, P-NO22, the shop tender 23, the balance on last month 24, the cash-receipt-and-disbursement classification 26, the transaction money amount 26, the trade date 27, the summary code 28, the recognition code 29, etc. are checked with a physical element like a beam, a type, a numeric check, and a digit number equal check. With the contents of the screen file 10 and the transaction information file 20, the application program A which checks the validity of input data is stored, at the time of operation of the online terminal 3, it is developed by CPU5 and processing is performed to the hard disk 6.

[0021]Next, if the operation on a screen is described, the transaction information file 20 shown in the screen file 10 shown in drawing 2 and drawing 3 exists in the online terminal 3, and the transaction number "999999" is related with it as common key search. The screen file 10 defines a screen layout, an input digit number, and input attributes (numeric data, kana data, etc.), and sets them up to each inputted item of NO.1 - 9. According to setting out of the screen file 10, operation of the application program A performs the validity of the length of input data, and the attribute of input data. for example, a trade date -- 6 figures -- and -- if "-478545" has minus numerals and tends to become an attribute error, when only a number is defined, and it is going to input "123456789" -- each purport of a digit number error -- an error message is displayed on CRT4 and processing which demands reinput from an operator is performed.

[0022]If the present date is March 5, Heisei 5, for example and the processing date (payday) of dealings is April 1, Heisei 5 when the prior mode dealings 35 shown by NO.5 of drawing 3 are conducted good (1 is set up) in the transaction information file 20, The input data of "050401" is dealt with as right input data in the input of the trade date 27 shown by NO.7 of the screen file 10. Since it will become effective [calculation] as data today conversely if it carries out improper [of the prior mode dealings 35] (0 is set up) "050401" (i.e., since it becomes effective ["050305"]), error handling is carried out.

[0023]Next, this is performed by the application program A although it is judgment of error handling. The flow is as being shown in drawing 4.

If the above-mentioned data is taken for an example, the screen file 10 will be read into the screen file 10 reading 42 by using the transaction number "999999" as a search key by the input of the transaction number by bottom of transaction number key press 41 from the keyboard 7. The transaction information file 20 is read into the transaction information file 20 reading 43.

[0024]Then, although the data input 46 of each item is carried out to the data input 46 from the keyboard 7, processing of the digit number check 47 of the screen file 10 and the attribute check 48 is performed there. Next, although the prior mode check 414 of the prior mode dealings 35 shown in NO.5 of the transaction information file 20 is performed in the processing at send key depression 49:00, Since the date is always received from the host computer 1 to a morning power up, it is judged by whether it is larger than an input date today according to the date. That is, when equal to the date today, it is set to O.K. and progresses to the uphill wording-of-a-telegram editing processing 415. If the date has become on the previous day, in the prior mode check 414, it will be set to NG as an input error, and reinput will be required of a return operator from ** at ** in front of the input data 46.

[0025]setting out of the officer's approval dealings 31 of the items shown in NO.1 in the transaction information file 20 when it mentions about the officer's approval dealings which are the dealings which need recognition of **** as a following example -- an owner (1 is set up) -- it carries out. Then, when a recognition card is led normally, a recognition code is displayed on CRT4. If send key depression 49 is taken in this state, a judgment of the officer's approval check 410 will be made. That is, since the recognition code is held, it is set to O.K. and it is judged that it is normal.

[0026]On the other hand, if reading of a recognition card is not performed, the dealings

concerned will perform a message indicator as a recognition error, and will serve as NG in the officer's approval check 410, and it will return from ** to ** in front of the input data 46, and it is **. Here, if a recognition card is read, a recognition code will be displayed on CRT4 and the officer's approval dealings check 410 at send key depression 49:00 will be passed normally.

[0027]Mode control is mentioned and explained as a following example. The dealings which needs the real-time operation of the on-line 1, i.e., a host computer, in dealings by a financial institution business store, There is off-line, i.e., the dealings which do not need a real-time operation with the host computer 1, or a state, i.e., dealings possible in the state of an idle mode etc., before receiving an on-line notice from the host computer 1. The online mode dealings 32 of NO.2 shown in the transaction information file 20 to each, the offline mode dealings 33 of NO.3, or the idle mode dealings 34 of NO.3 are conducted.

[0028]According to setting out of the transaction information file 20, a judgment of the off-line mode check 411, the on-line mode check 412, and the idle mode check 413 is made with the application program A. Since it will become a transaction error here, for example if good dealings of the online mode dealings 32 are conducted from the online terminal 3 to the host computer 1 by an idle mode, Once, it trades to the host computer 1 in on-line starting service, and reception of a normal response performs the online trade 32 to it after that.

[0029]The state (dealings mode) of dealings with the host computer 1 has window (line) job mode and back (two lines) job mode as a feature of the financial institution business itself independently. If setting out of the back mode dealings 36 of the transaction information files 20 and the window mode dealings 37 is performed, the application program A will perform the back mode dealings check 44 and the window mode dealings check 45 before processing of the data input 46.

[0030]Here, if it becomes an error, the purport message which cannot conduct dealings from each NG** of the back mode dealings check 44 or the window mode dealings check 45 will be displayed, it will return to ** in front of bottom of transaction number key press 41, and change of a transaction number will be demanded from an operator. If this check is normal, it will be set to O.K. and the data input 46 will become possible.

[0031]

[Effect of the Invention]As explained to details above, according to the distinction method by the screen control of the online terminal of this invention. In order to judge whether it is data which should be transmitted to a host computer by a specific file and processing of a program in which it corresponds in an online terminal, Transmitting the wording of a telegram used as a host error decreases, and improvement in the processing efficiency of dealings can be measured by performing error checking at the time of an input promptly.

[Translation done.]

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TECHNICAL FIELD

[Industrial Application]This invention relates to the distinction method by the screen control of the online terminal of a financial institution business store especially about the distinction method by the screen control of an online terminal.

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PRIOR ART

[Description of the Prior Art]If the screen control in the online terminal of a financial institution business store is conventionally explained in simple in consideration of drawing 1, the screen control in an online terminal, It is performed by the host computer 1 and the online terminal 3 which connected with this host computer 1 via the data telecommunication line. The relay aircraft 2 is formed in the middle of the data telecommunication line.

[0003]The online terminal 3 has CRT4, CPU5, the hard disk 6, the keyboard 7, and the printer 8. In the online terminal 3, it inputs by choosing a screen by the key operation of the keyboard 7, and data is transmitted to the host computer 1 through the relay aircraft 2. In that case, the data relevant to applicable dealings is read from other dealings, and it displays on CRT4, and transmits to the host computer 1.

[0004]The host computer 1 carried out analysis processing of the input data from the online terminal 3, and has replied the notice of a response of a normal result or an unusual result to the online terminal 3 (see JP,2-35569,A).

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EFFECT OF THE INVENTION

[Effect of the Invention]As explained to details above, according to the distinction method by the screen control of the online terminal of this invention. In order to judge whether it is data which should be transmitted to a host computer by a specific file and processing of a program in which it corresponds in an online terminal, Transmitting the wording of a telegram used as a host error decreases, and improvement in the processing efficiency of dealings can be measured by performing error checking at the time of an input promptly.

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]As mentioned above, the chief aim is placed by laborsaving of the input process in the screen control of the conventional online terminal, but. The method was laborsaving (the number of inputs is reduced) of a direct input, such as reusing the data used by pre-dealings, or holding a pre-dealings result as associated data of other dealings, and reusing it.

[0006]However, in the screen control of the conventional online terminal, Processing of the check of the validity of data, for example, online trade improper dealings, prior calculation expense improper dealings, or officer's approval important point dealings, The host computer 1 is performing, and if there is no input of a recognition code, in order to perform an error-handling response inevitably, with the host computer 1, there is a problem that reinput and retransmission of message will be needed from the online terminal 3.

[0007]So, there is SUBJECT of this invention in providing the distinction method by the screen control of the online terminal which lessens error handling with a host computer as much as possible.

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MEANS

[Means for Solving the Problem]In a distinction method [according to this invention] by screen control of an online terminal, A screen file which sets up a digit number, an attribute, and a screen layout to input data inputted from a keyboard, A transaction information file which sets up dealings modes, such as existence of officer's approval dealings, and an on-line off-line idol, and job mode of a window and back, A distinction method by screen control of an online terminal having an application program which distinguishes validity as dealings other than the physical validity of said input data by using a transaction number as a common key using said screen file and said transaction information file is obtained.

[0009]In a distinction method by screen control of an online terminal which holds interactive processing with a host computer according to this invention, A distinction method by screen control of an online terminal carrying out error handling within said online terminal, and demanding reinput from an operator with an application program to a transaction information file which enables distinction of the logical validity of input data is obtained.

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OPERATION

[Function]According to this invention, to the transaction information file which enables distinction of the logical validity of input data, without creating the wording of a telegram by which error handling is beforehand carried out with a host computer, error handling is carried out within an online terminal, and reinput is demanded from an operator with an application program.

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EXAMPLE

[Example]Next, one example of the distinction method by the screen control of the online terminal of this invention is described based on drawing 1 thru/or drawing 4.

[0012]First, with reference to drawing 1, the distinction method by the screen control of an online terminal is held by the host computer 1 and the online terminal 3 which connected with this host computer 1 via the data telecommunication line. The relay aircraft 2 is formed in the middle of the data telecommunication line.

[0013]CRT4 which displays the contents as which the online terminal 3 was inputted by the keyboard 7 which inputs, and this keyboard 7, It has the hard disk 6, CPU5 which develop and process required information from this hard disk 6, and the printer 8 which prints the processing result from the host computer 1.

[0014]The host computer 1 carries out analysis processing of the input data from the online terminal 3, and replies the notice of a response of a normal result or an unusual result to the online terminal 3.

[0015]In the distinction method by the screen control of this online terminal. The screen file (see drawing 2) 10 which has a function which checks the physical element of the data of length, an input character type, etc. of input data to the contents of the keystroke, It has the transaction information file (see drawing 3) 20 for confirming whether transmit the contents of dealings to the host computer 1 logically about the screen file 10. It has the application program A which associates the screen file 10 and the transaction information file 20, and performs the contents check of input data.

[0016]The transaction information file 20 enables distinction of the logical validity of input data, and to the transaction information file 20 with the application program A. The wording of a telegram by which error handling is beforehand carried out with the host computer 1 is not created, but error handling is carried out within the online terminal 3, reinput is demanded from an operator, and processing efficiency is raised. The application program A distinguishes the validity as dealings.

[0017]The host computer 1 in a financial institution business store, The send data from the online terminal 3 is processed, if the processing result is normal, that, the contents of passbook check printing will be sent to the online terminal 3 via the relay aircraft 2, and, in the case of abnormal termination, an error notification will be sent to the online terminal 3 via the relay aircraft 2.

[0018]On the other hand, the online terminal 3 creates the data which should be sent to the host computer 1. For this reason, a screen number for an operator to trade is inputted into the keyboard 7, looking at the display of CRT4. Then, the screen file 10 is called from the hard disk 6, and it develops by CPU5, and is displayed on CRT4. Here, the data transmitted to the host computer 1 is created by performing the item input from the keyboard 7. After a keystroke is completed, by carrying out the depression of the send key of the keyboard 7, the wording of a telegram processed to the host computer 1 will be transmitted, and it will wait for a processing result. And each processing in the case where it prints to the printer 8 according to the contents of a response from the host computer 1, and the case of displaying on CRT4 is performed, and applicable dealings are ended. Handling [a cash processing machine may be

connected depending on the case, and / cash receipt and disbursement].

[0019]As mentioned above, the online terminal 3 chooses the screen which trades, inputs data, transmits to the host computer 1, and processes the contents of a response.

[0020]Here, if processing of the data content on a screen is described, the screen file 10 and the transaction information file 20 are stored in the hard disk 6. As each item, as shown in No.1 - No.9, the screen file 10, It has a function in which the account number 21, P-NO22, the shop tender 23, the balance on last month 24, the cash-receipt-and-disbursement classification 26, the transaction money amount 26, the trade date 27, the summary code 28, the recognition code 29, etc. are checked with a physical element like a beam, a type, a numeric check, and a digit number equal check. With the contents of the screen file 10 and the transaction information file 20, the application program A which checks the validity of input data is stored, at the time of operation of the online terminal 3, it is developed by CPU5 and processing is performed to the hard disk 6.

[0021]Next, if the operation on a screen is described, the transaction information file 20 shown in the screen file 10 shown in drawing 2 and drawing 3 exists in the online terminal 3, and the transaction number "999999" is related with it as common key search. The screen file 10 defines a screen layout, an input digit number, and input attributes (numeric data, kana data, etc.), and sets them up to each inputted item of NO.1 - 9. According to setting out of the screen file 10, operation of the application program A performs the validity of the length of input data, and the attribute of input data. for example, a trade date -- 6 figures -- and -- if "-478545" has minus numerals and tends to become an attribute error, when only a number is defined, and it is going to input "123456789" -- each purport of a digit number error -- an error message is displayed on CRT4 and processing which demands reinput from an operator is performed.

[0022]If the present date is March 5, Heisei 5, for example and the processing date (payday) of dealings is April 1, Heisei 5 when the prior mode dealings 35 shown by NO.5 of drawing 3 are conducted good (1 is set up) in the transaction information file 20, The input data of "050401" is dealt with as right input data in the input of the trade date 27 shown by NO.7 of the screen file 10. Since it will become effective [calculation] as data today conversely if it carries out improper [of the prior mode dealings 35] (0 is set up) "050401" (i.e., since it becomes effective ["050305"]), error handling is carried out.

[0023]Next, this is performed by the application program A although it is judgment of error handling. The flow is as being shown in drawing 4.

If the above-mentioned data is taken for an example, the screen file 10 will be read into the screen file 10 reading 42 by using the transaction number "999999" as a search key by the input of the transaction number by bottom of transaction number key press 41 from the keyboard 7. The transaction information file 20 is read into the transaction information file 20 reading 43.

[0024]Then, although the data input 46 of each item is carried out to the data input 46 from the keyboard 7, processing of the digit number check 47 of the screen file 10 and the attribute check 48 is performed there. Next, although the prior mode check 414 of the prior mode dealings 35 shown in NO.5 of the transaction information file 20 is performed in the processing at send key depression 49:00, Since the date is always received from the host computer 1 to a morning power up, it is judged by whether it is larger than an input date today according to the date. That is, when equal to the date today, it is set to O.K. and progresses to the uphill wording-of-a-telegram editing processing 415. If the date has become on the previous day, in the prior mode check 414, it will be set to NG as an input error, and reinput will be required of a return operator from ** at ** in front of the input data 46.

[0025]setting out of the officer's approval dealings 31 of the items shown in NO.1 in the transaction information file 20 when it mentions about the officer's approval dealings which are the dealings which need recognition of **** as a following example -- an owner (1 is set up) -- it carries out. Then, when a recognition card is led normally, a recognition code is displayed on CRT4. If send key depression 49 is taken in this state, a judgment of the officer's approval check 410 will be made. That is, since the recognition code is held, it is set to O.K. and it is judged that it is normal.

[0026]On the other hand, if reading of a recognition card is not performed, the dealings

concerned will perform a message indicator as a recognition error, and will serve as NG in the officer's approval check 410, and it will return from ** to ** in front of the input data 46, and it is **. Here, if a recognition card is read, a recognition code will be displayed on CRT4 and the officer's approval dealings check 410 at send key depression 49:00 will be passed normally.

[0027]Mode control is mentioned and explained as a following example. The dealings which needs the real-time operation of the on-line 1, i.e., a host computer, in dealings by a financial institution business store, There is off-line, i.e., the dealings which do not need a real-time operation with the host computer 1, or a state, i.e., dealings possible in the state of an idle mode etc., before receiving an on-line notice from the host computer 1. The online mode dealings 32 of NO.2 shown in the transaction information file 20 to each, the offline mode dealings 33 of NO.3, or the idle mode dealings 34 of NO.3 are conducted.

[0028]According to setting out of the transaction information file 20, a judgment of the off-line mode check 411, the on-line mode check 412, and the idle mode check 413 is made with the application program A. Since it will become a transaction error here, for example if good dealings of the online mode dealings 32 are conducted from the online terminal 3 to the host computer 1 by an idle mode, Once, it trades to the host computer 1 in on-line starting service, and reception of a normal response performs the online trade 32 to it after that.

[0029]The state (dealings mode) of dealings with the host computer 1 has window (line) job mode and back (two lines) job mode as a feature of the financial institution business itself independently. If setting out of the back mode dealings 36 of the transaction information files 20 and the window mode dealings 37 is performed, the application program A will perform the back mode dealings check 44 and the window mode dealings check 45 before processing of the data input 46.

[0030]Here, if it becomes an error, the purport message which cannot conduct dealings from each NG** of the back mode dealings check 44 or the window mode dealings check 45 will be displayed, it will return to ** in front of bottom of transaction number key press 41, and change of a transaction number will be demanded from an operator. If this check is normal, it will be set to O.K. and the data input 46 will become possible.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]It is a block diagram explaining this invention and the distinction method by the screen control of the conventional online terminal.

[Drawing 2]It is an explanatory view showing the setting detail of the screen file adopted as the screen control of this invention and the conventional online terminal.

[Drawing 3]It is an explanatory view showing the setting detail of the transaction information file used as an example of this invention.

[Drawing 4]It is a flow chart of the entry content distinction used as an example of this invention.

[Description of Notations]

1 Host computer

2 Relay aircraft

3 Online terminal

4 CRT

5 CPU

6 Hard disk

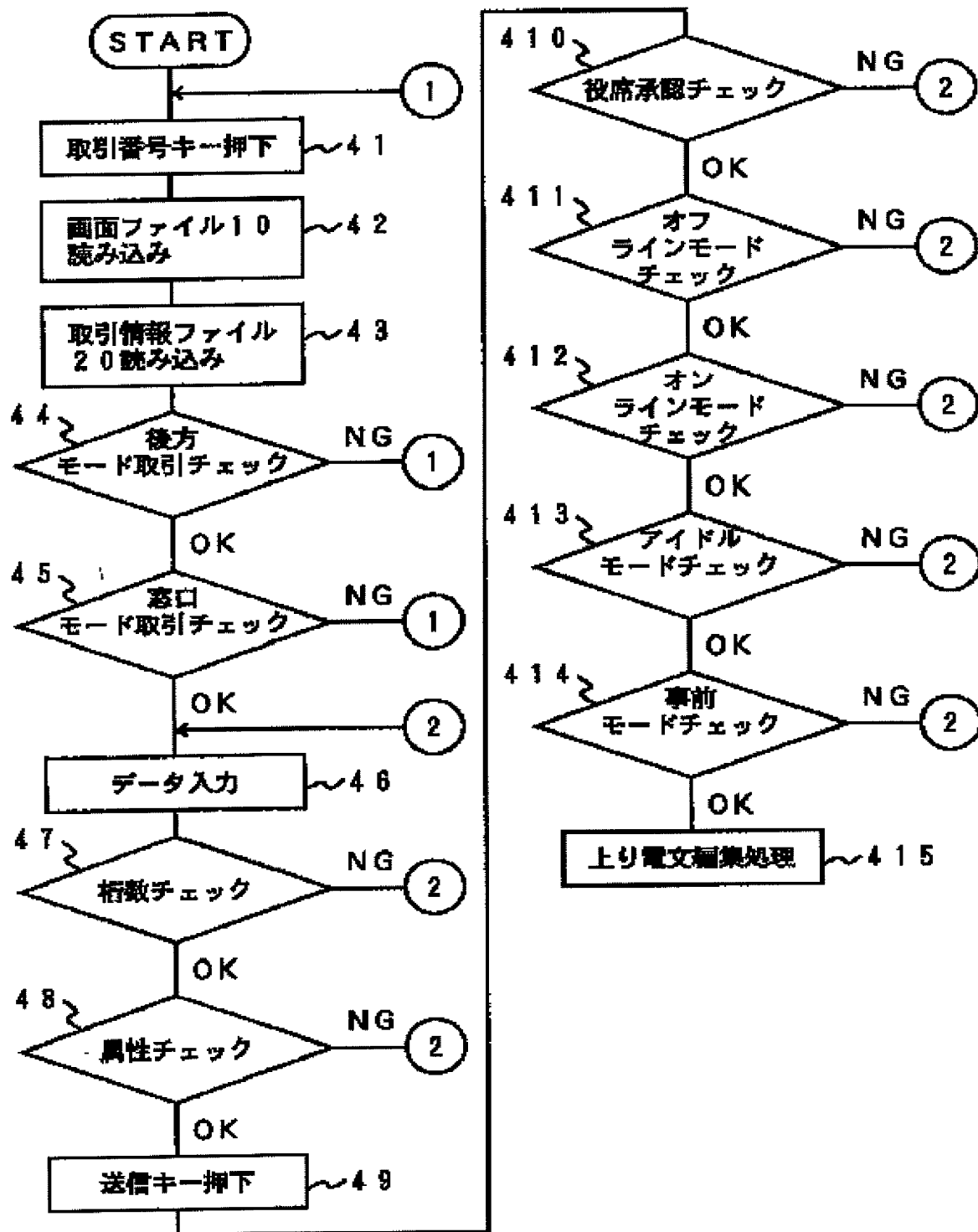
7 Keyboard

8 Printer

10 Screen file

20 Transaction information file

[Translation done.]



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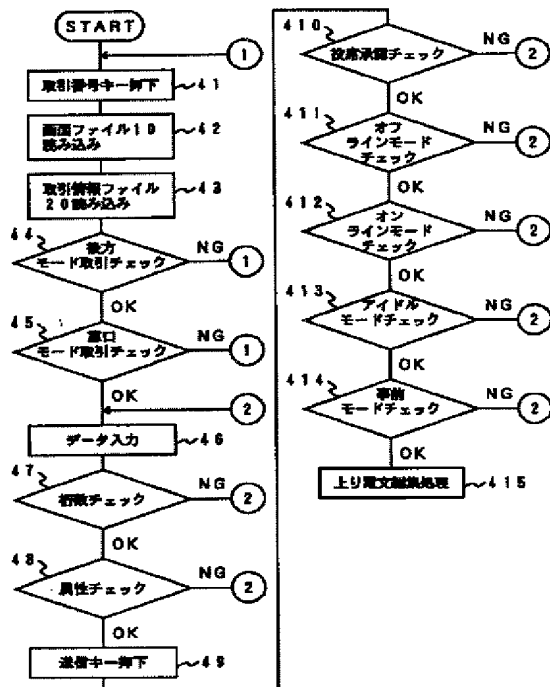
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(54) 【発明の名称】 オンライン端末装置の画面制御による判別方式

(57) 【要約】

【目的】 ホストコンピュータによるエラー処理を極力少なくすること。

【構成】 キー入力の内容に対し、入力データの長さや入力文字タイプなどデータの物理的要素をチェックする機能を有する画面ファイル10と、該画面ファイル10に関して取引の内容を論理的にホストコンピュータ1へ送信するか否かをチェックするための取引情報ファイル20とを有している。さらに、前記画面ファイル10と前記取引情報ファイル20とを関連づけて入力データの内容チェックを行うアプリケーションプログラムAを有している。



【特許請求の範囲】

【請求項1】 オンライン端末装置の画面制御による判別方式において、キーボードから入力された入力データに対し、桁数、属性や画面レイアウトを設定する画面ファイルと、役席承認取引の有無やオンライン・オフライン・アイドルなどの取引モード、窓口・後方の業務モードを設定する取引情報ファイルと、前記画面ファイル及び前記取引情報ファイルを用い、取引番号を共通キーとして前記入力データの物理的妥当性の他に、取引としての妥当性を判別するアプリケーションプログラムとを有していることを特徴とするオンライン端末装置の画面制御による判別方式。

【請求項2】 ホストコンピュータとの会話型処理を行うオンライン端末装置の画面制御による判別方式において、入力データの論理的妥当性の判別を可能にする取引情報ファイルに対してアプリケーションプログラムにより、前記オンライン端末装置内でエラー処理し、再入力をおし操作者に促すことを特徴とするオンライン端末装置の画面制御による判別方式。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明はオンライン端末装置の画面制御による判別方式に関し、特に、金融機関営業店のオンライン端末装置の画面制御による判別方式に関する。

【0002】

【従来の技術】従来、金融機関営業店のオンライン端末装置における画面制御について、図1を参照して簡略的に説明すると、オンライン端末装置における画面制御は、ホストコンピュータ1と、このホストコンピュータ1にデータ通信回線を介して接続したオンライン端末装置3とによって行われる。データ通信回線の途中には中継機2が設けられている。

【0003】オンライン端末装置3は、CRT4、CPU5、ハードディスク6、キーボード7、及びプリンタ8とを有している。オンライン端末装置3では、キーボード7のキー操作により画面を選択し入力を行いデータを中継機2を通してホストコンピュータ1へ送信する。その際、該当取引に関連するデータを他の取引から読みだし、CRT4に表示し、ホストコンピュータ1へ送信する。

【0004】ホストコンピュータ1は、オンライン端末装置3からの入力データを解析処理し、正常結果や異常結果の応答通知をオンライン端末装置3に返信している（例えば、特開平2-35569号公報を参照）。

【0005】

【発明が解決しようとする課題】上述したように、従来のオンライン端末装置の画面制御においては、入力処理の省力化に主眼が置かれているが、その方法は、前取引で使用したデータを再利用するとか、前取引結果を他の

取引の関連データとして保持し再利用するなど、直接的な入力の省力化（入力数を減らす）であった。

【0006】しかしながら、従来のオンライン端末装置の画面制御においては、データの妥当性のチェック、例えばオンライン取引不可取引、事前勘定費不可取引や役席承認要取引の処理は、ホストコンピュータ1によって行っており、承認コードの入力がなければホストコンピュータ1では必然的にエラー処理応答を行うため、オンライン端末装置3からは再入力、再送信が必要になってしまふという問題がある。

【0007】それ故に、本発明の課題は、ホストコンピュータによるエラー処理を極力少なくするオンライン端末の画面制御による判別方式を提供することにある。

【0008】

【課題を解決するための手段】本発明によれば、オンライン端末装置の画面制御による判別方式において、キーボードから入力された入力データに対し、桁数、属性や画面レイアウトを設定する画面ファイルと、役席承認取引の有無やオンライン・オフライン・アイドルなどの取引モード、窓口・後方の業務モードを設定する取引情報ファイルと、前記画面ファイル及び前記取引情報ファイルを用い、取引番号を共通キーとして前記入力データの物理的妥当性の他に、取引としての妥当性を判別するアプリケーションプログラムとを有していることを特徴とするオンライン端末装置の画面制御による判別方式が得られる。

【0009】また、本発明によれば、ホストコンピュータとの会話型処理を行うオンライン端末装置の画面制御による判別方式において、入力データの論理的妥当性の判別を可能にする取引情報ファイルに対してアプリケーションプログラムにより、前記オンライン端末装置内でエラー処理し再入力をおし操作者に促すことを特徴とするオンライン端末装置の画面制御による判別方式が得られる。

【0010】

【作用】本発明によると、入力データの論理的妥当性の判別を可能にする取引情報ファイルに対してアプリケーションプログラムにより、予めホストコンピュータでエラー処理される電文を作成せずに、オンライン端末装置内でエラー処理し再入力をおし操作者に促す。

【0011】

【実施例】次に、本発明のオンライン端末の画面制御による判別方式の一実施例について図1乃至図4に基づき説明する。

【0012】まず、図1を参照して、オンライン端末装置の画面制御による判別方式は、ホストコンピュータ1と、このホストコンピュータ1にデータ通信回線を介して接続したオンライン端末装置3とによって行われる。データ通信回線の途中には中継機2が設けられている。

【0013】オンライン端末装置3は、キー入力を行う

キーボード7と、このキーボード7により入力された内容を表示するCRT4と、ハードディスク6と、このハードディスク6から必要な情報を展開し処理するCPU5と、ホストコンピュータ1からの処理結果を印字するプリンタ8とを有している。

【0014】ホストコンピュータ1は、オンライン端末装置3からの入力データを解析処理し、正常結果や異常結果の応答通知をオンライン端末装置3に返信する。

【0015】このオンライン端末装置の画面制御による判別方式では、キー入力の内容に対し、入力データの長さや入力文字タイプなどデータの物理的要素をチェックする機能を有する画面ファイル(図2を参照)10と、画面ファイル10に関して取引の内容を論理的にホストコンピュータ1へ送信するかどうかをチェックするための取引情報ファイル(図3を参照)20とを有している。さらに、画面ファイル10と取引情報ファイル20とを関連づけて入力データの内容チェックを行うアプリケーションプログラムAを有している。

【0016】取引情報ファイル20は、入力データの論理的妥当性の判別を可能にし、取引情報ファイル20に対しアプリケーションプログラムAにより、予めホストコンピュータ1でエラー処理される電文を作成せず、オンライン端末装置3内でエラー処理し再入力を操作者に促し処理効率を向上させる。アプリケーションプログラムAは、取引としての妥当性を判別する。

【0017】金融機関営業店におけるホストコンピュータ1は、オンライン端末装置3からの送信データを処理し、処理結果が正常であれば、その旨、通帳伝票印字の内容を中継機2を介してオンライン端末装置3へ送り、異常終了の場合にはエラー通知を中継機2を介してオンライン端末装置3へ送る。

【0018】一方、オンライン端末装置3は、ホストコンピュータ1へ送るべきデータを作成する。このために、キーボード7には操作者が取引を行うための画面番号をCRT4の表示を見ながら入力する。すると、ハードディスク6から画面ファイル10を呼び出され、CPU5により展開しCRT4に表示される。ここで、キーボード7からの項目入力を行うことによってホストコンピュータ1へ送信するデータを作成する。キー入力終了すると、キーボード7の送信キーを押下することによりホストコンピュータ1へ処理する電文を送信し、処理結果を待つことになる。そして、ホストコンピュータ1からの応答内容によりプリンタ8へ印字する場合と、CRT4へ表示する場合のそれぞれの処理を行い該当取引を終了する。なお、場合によっては現金処理機を接続して入出金の取扱いを行うこともある。

【0019】上述したように、オンライン端末装置3は、取引を行う画面を選択し、データを入力して、ホストコンピュータ1へ送信し、その応答内容を処理するのである。

【0020】ここで、画面上のデータ内容の処理について述べると、ハードディスク6には画面ファイル10と取引情報ファイル20とが格納されている。画面ファイル10は、各項目として、No. 1~No. 9に示すように、口座番号21、P-NO22、店番23、前残24、入出金区分26、取引金額26、取引日27、摘要コード28、承認コード29などが桁、タイプ、数字チェック、桁数イコールチェックのような物理的要素でチェックされる機能を有している。また、ハードディスク6には、画面ファイル10及び取引情報ファイル20の内容とともに、入力データの妥当性をチェックするアプリケーションプログラムAも格納され、オンライン端末装置3の動作時には、CPU5に展開され処理が行なわれる。

【0021】次に、画面上の動作について述べると、オンライン端末装置3には、図2に示す画面ファイル10と図3に示す取引情報ファイル20とが存在し、取引番号「999999」を共通キー検索として関連づけている。画面ファイル10は、画面レイアウト、入力桁数、また、入力属性(数字データ、カナデータ等)を定義し、NO. 1~9の各入力項目に対し設定する。画面ファイル10の設定にしたがいアプリケーションプログラムAの動作により、入力データの長さの妥当性や入力データの属性を行う。例えば、取引日は6桁でかつ数字のみの定義を行うと、「-478545」はマイナス符号があり属性エラーとなり、「123456789」と入力しようすると、桁数エラーの旨それぞれエラーメッセージをCRT4に表示し、再入力を操作者に促す処理を行う。

【0022】さらに、取引情報ファイル20において、図3のNO. 5で示す事前モード取引35を可(1を設定)にすると、例えば現在の日付けが平成5年3月5日であり、取引の処理日(勘定日)が平成5年4月1日であれば、画面ファイル10のNO. 7で示す取引日27の入力で「050401」の入力データが正しい入力データとして取り扱われる。また、逆に、事前モード取引35を不可(0を設定)すると、本日勘定のみデータとして有効となるため、即ち、「050305」のみ有効となるため「050401」はエラー処理される。

【0023】次に、エラー処理の判断であるが、これはアプリケーションプログラムAで行われる。そのフローは、図4に示す通りであり、前述のデータを例にとると、キーボード7からの取引番号キー押下41による取引番号の入力により取引番号「999999」を検索キーとして、画面ファイル10が画面ファイル10読み込み42に読み込まれる。また、取引情報ファイル20が取引情報ファイル20読み込み43に読み込まれる。

【0024】続いて、キーボード7からデータ入力46に各項目のデータ入力46を行うが、そこで、画面ファイル10の桁数チェック47及び属性チェック48の処

理を行う。次に、送信キー押下49時の処理において、取引情報ファイル20のNO. 5に示す事前モード取引35の事前モードチェック414を行うが、本日日付は、常に朝の電源投入時にホストコンピュータ1から受けとるので、その日付けに従い入力日付けよりも大いか否かで判断する。即ち、本日日付に等しいときには、OKとなり、上り電文編集処理415へ進む。又、日付が前日になっていると入力エラーとして事前モードチェック414においてNGとなり②から入力データ46の前の②に戻り操作者に再入力の要求を行う。

【0025】次の例として、役席の承認を必要とする取引である役席承認取引について挙げると、取引情報ファイル20においてNO. 1に示す項目の役席承認取引31の設定を有(1を設定)とする。すると、承認カードを正常にリードした場合は、CRT4に承認コードが表示される。この状態で送信キー押下49すると、役席承認チェック410の判断が行われる。即ち、承認コードが保持されているため、OKとなり正常と判断される。

【0026】一方、承認カードの読取りが行われていないと当該取引は承認エラーとしてメッセージ表示を行い役席承認チェック410においてNGとなり②から、入力データ46の前の②に戻る。ここで、承認カードの読み込みを行うと、CRT4に承認コードが表示され、送信キー押下49時の役席承認取引チェック410を正常に通過する。

【0027】さらに、次の例として、モード管理を挙げて説明する。金融機関営業店による取引の中ではオンライン、即ちホストコンピュータ1とのリアルタイム処理が必要な取引、オフライン、即ちホストコンピュータ1とのリアルタイム処理が不要な取引、または、ホストコンピュータ1からオンラインの通知を受ける前の状態、即ち、アイドルモードの状態での可能な取引などがある。それぞれに対し取引情報ファイル20に示すNO. 2のオンラインモード取引32、NO. 3のオフラインモード取引33、またはNO. 3のアイドルモード取引34を行う。

【0028】また、取引情報ファイル20の設定にしたがい、アプリケーションプログラムAによって、オフラインモードチェック411、オンラインモードチェック412、アイドルモードチェック413の判断を行う。ここで、例えば、アイドルモードでオンライン端末装置3からホストコンピュータ1に対しオンラインモード取引32の可取引を行うと処理エラーとなるため、一度ホストコンピュータ1にオンライン開局の取引を行い、正常応答の受信によりその後、オンライン取引32を行

う。

【0029】さらに、ホストコンピュータ1との取引の状態(取引モード)とは別に、金融機関業務自体の特徴として、窓口(一線)業務モード、後方(二線)業務モードとがある。取引情報ファイル20の後方モード取引36、窓口モード取引37の設定を行うと、アプリケーションプログラムAでは、データ入力46の処理の前で、後方モード取引チェック44、窓口モード取引チェック45を行う。

10 【0030】ここで、エラーになると、後方モード取引チェック44又は窓口モード取引チェック45の各NG①から取引が行えない旨メッセージを表示し、取引番号キー押下41の前の①に戻り取引番号の変更を操作者に促す。このチェックが正常であればOKとなりデータ入力46が可能になる。

【0031】

20 【発明の効果】以上詳細に説明したように、本発明のオンライン端末の画面制御による判別方式によれば、オンライン端末装置内に特定のファイルと対応するプログラムの処理によりホストコンピュータへ送信すべきデータか否かを判断するため、ホストエラーとなる電文を送信することが少なくなり、入力時のエラーチェックが直ちに行われることにより取引の処理効率の向上が計れる。

【図面の簡単な説明】

【図1】本発明及び従来のオンライン端末装置の画面制御による判別方式を説明したブロック図である。

【図2】本発明及び従来のオンライン端末装置の画面制御に採用される画面ファイルの設定内容を示した説明図である。

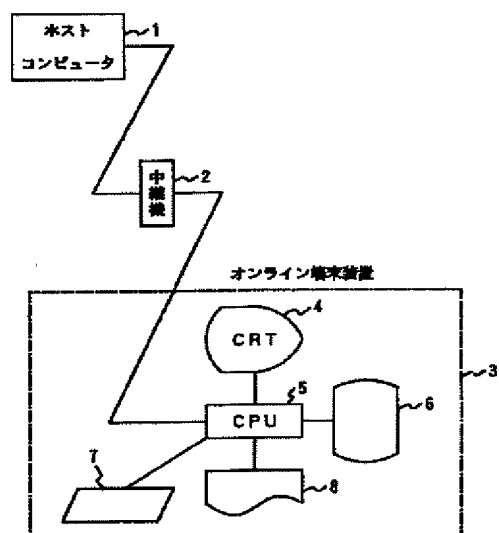
30 【図3】本発明の一例となる取引情報ファイルの設定内容を示した説明図である。

【図4】本発明の一例となる入力内容判別のフロー図である。

【符号の説明】

- 1 ホストコンピュータ
- 2 中継機
- 3 オンライン端末装置
- 4 CRT
- 5 CPU
- 40 6 ハードディスク
- 7 キーボード
- 8 プリンタ
- 10 画面ファイル
- 20 取引情報ファイル

【図1】



【図2】

画面ファイル10

取引番号	999999				
No.	項目名	桁	タイプ	数字チェック	桁数イコールチェック
1	口座番号	7	数字	有	有
2	P-NO	7	数字	有	有
3	店番	3	数字	有	
4	前残	13	数字	有	
5	入出金区分	1	数字	有	
6	取引金額	13	数字	有	
7	取引日	6	数字	有	有
8	摘要コード	2	数字	有	
9	承認コード	4	数字	有	有
~	~	~	~	~	~

【図3】

取引情報ファイル20

取引番号	000000		
No.	項目名	有/無	
1	夜間承認取引	有	~31
2	オンラインモード取引	有	~32
3	オフラインモード取引		~33
4	アイドルモード取引		~34
5	事前モード取引	有	~35
6	後方モード取引	有	~36
7	窓口モード取引		~37
~	~	~	~

【図4】

